



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0016

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLI
COMMISSIONER

October 7, 2003
Subject: South Portland
Project No. STP-9467 (00)X
PIN 9467.00
Bid Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to your Bid Package:

Add the attached 3 page "Special Provision 608 – Detectable Warnings (Masonry Pavers)" dated October 7, 2003.

Add the attached one page Detail Sheet entitled "Views and Details Of The Detectable Warning".

Make the following changes by pen and ink:

In the Schedule of Items:

Change the units in Item 608.253 from "M" (meters) to "M2" (meters squared).

On Plan Sheet 3 of 13, Quantities, revise the unit of pay item 608.253 from "M" to "M2".

All circular vertical curb type 1, circular curb type 5, and resetting of circular curbing, will be included for payment under items 609.11, 609.34, and 609.444, as appropriate.

Payment for "Mulch" will be incidental to "Seeding" pay items.

Consider this change prior to submitting your bid on October 8, 2003.

Sincerely,

Bruce R. Carter
Contracts Engineer



PRINTED ON RECYCLED PAPER

SPECIAL PROVISION
SECTION 608

DETECTABLE WARNINGS
(Masonry Pavers)

Description: This work includes the installation of detectable warnings on concrete and/or asphalt curb ramps at the locations shown in the plans and in accordance with the plans or as established by Project Personnel.

Materials:

General All base courses and joints shall conform to the applicable subsections of Division 700 of the Standard Specifications.

The Contractor shall provide new, vacuum dry-pressed, bevel-edged and kiln-fired, solid (uncored), hard-burned, frost-free, masonry pavers complying with the requirements of ASTM C902, Class SX, Application PS, with the following modifications:

- (a) The maximum absorption limit shall be 8 percent for the average of five bricks.
- (b) The minimum compressive strength shall not be less than 8,000 pounds per square inch.
- (c) The modulus of rupture shall not be less than 1,000 pounds per square inch.
- (d) The bricks shall be No. 1, water struck type for paving.

A. Samples and Submittals:

- 1. The following list is provided for information only, and does not limit the Contractor to the use of only these suppliers. However, the Contractor shall submit a sample of the product, the name of the selected supplier, and color samples to the Project Personnel for approval prior to start of work.

Vendor Name	Product	Phone Numbers
Whitacre-Greer c/o Brooks Brick Co.	Masonry Pavers	(207) 989-3318
Endicott Clay Products	Masonry Pavers	(402) 729-3315

B. Masonry pavers and sand bedding shall conform to the following material requirements:

1. Detectable warnings on curb ramps shall be truncated domes of the dimensions shown in the plans. Domes shall be prefabricated by the manufacturer as a pattern on masonry pavers.
2. Pavers shall meet all Americans with Disabilities Act Accessibility Guidelines (ADAAG) requirements for truncated domes, and when installed, shall be capable of producing the pattern of domes as shown in the plans. Pavers shall meet the requirements of ASTM C 902 or ASTM C 936.
3. The domes and the underlying surface shall have a minimum of 70% contrast with the light reflectivity of the adjoining surface as specified under the Americans with Disabilities Act Accessibility Guidelines (ADAAG) requirements for truncated domes.
4. The contrast shall be achieved by adding pigment during the fabrication of the pavers. Prior to start of work, the Contractor shall submit appropriate documentation from the manufacturer verifying that the contrast has been met, along with a sample paver, to the Project Personnel for approval.
5. Bedding and joint sand shall be free of deleterious or foreign matter. The sand shall be natural or manufactured from crushed rock. Limestone screenings or stone dust shall not be used. Sand for bedding material shall conform to ASTM C 33. Sand that is to be placed between joints shall conform to ASTM C 144.

CONSTRUCTION REQUIREMENTS

General: Pre-fabricated masonry pavers for detectable warnings shall be brought to the site in steel banded, plastic banded or plastic wrapped cubes capable of being transported by a fork lift or clamp lift. Pavers shall be carefully removed and stacked in a manner that results in the least amount of damage. All pavers that are damaged during transport or delivery will be rejected and shall be replaced at the Contractor's expense. Minor cracks or chipping due to transport and handling that do not interfere with the structural integrity of the pavers or the overall pattern of truncated domes will not be deemed as grounds for rejection.

Placing:

A. Sand Setting Bed:

1. The Contractor shall spread the bedding sand evenly in the defined area and shall screed the sand to a depth of ¾" to 1½" over a compacted gravel base.

B. Paver Installation:

1. Pavers shall be placed in a running bond pattern. Domes shall be aligned to create a square grid in the predominant direction of travel as shown in the plans. Pavers shall be installed such that the base of the truncated dome is at the same elevation as the adjoining surface, allowing for a smooth transition between the curb ramp and the detectable warning.

2. When cut pavers are required to fill gaps between the pavers and the edge of concrete, the Contractor shall bevel portions of the truncated domes at a 45-degree angle to create a smooth transition between the partial dome and the curb ramp surface. Unless otherwise directed by the Project Personnel, pavers shall be cut and installed in such a manner that the domes on the cut sections will not significantly impact the overall pattern of the truncated domes.

D. Compaction

1. The Contractors shall use a plate vibrator to embed the pavers into the sand. The size and type of plate vibrator shall be in accordance with manufacturer's recommendations, or as directed by the Project Personnel. All pavers that are damaged during embedment shall be replaced at the Contractor's expense.

2. Joint spacing between paver units shall be in accordance with the manufacturer's recommendations, or as approved by the Project Personnel. Joints shall be filled completely with joint sand. Excess sand shall be removed by sweeping.

Method of Measurement:

Detectable warnings on new curb ramps, including sand, pavers, and all other work and materials necessary for fabrication, transport, and installation will not be measured and paid for separately, but shall be included in the work.

Truncated domes that are installed on existing curb ramps will be measured by the actual number of square feet that are installed and accepted.

Basis of Payment:

Payment will be full compensation for all labor, materials, and equipment required to install the truncated domes including surface preparation and removal/replacement of concrete or asphalt.

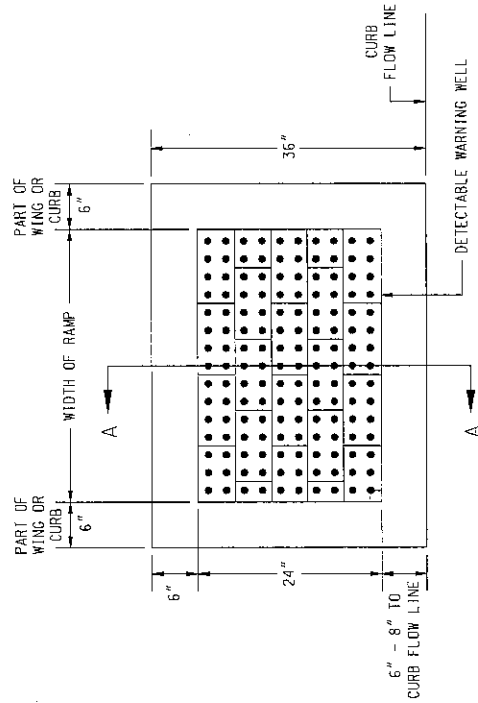
Pay Item

608.253 Masonry Paver with Truncated Domes

Pay Unit

Square Foot

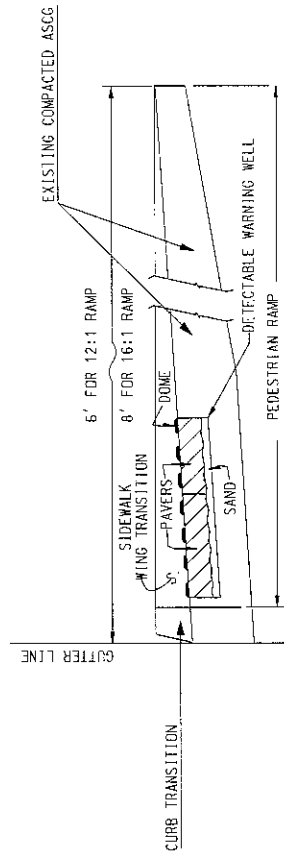
VIEWS AND DETAILS OF THE DETECTABLE WARNING



PLAN VIEW OF

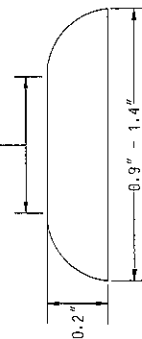
DETECTABLE WARNING AND WELL

(PAVERS NOT DRAWN TO SCALE)

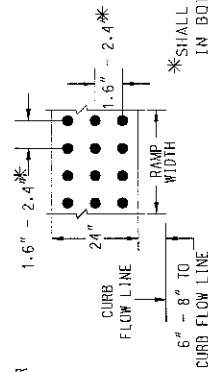


SIDE SECTION VIEW OF
DETECTABLE WARNING, WELL, CURB, AND GUTTER

THE TOP DIAMETER OF THE TRUNCATED DOMES
SHALL BE 50% TO 65% OF THE BASE DIAMETER

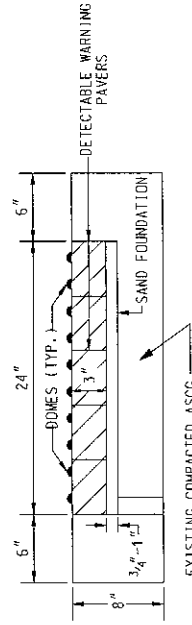


ELEVATION VIEW



PLAN VIEW

DOMES AND DETECTABLE WARNING DETAILS



SECTION A-A

NOTE:
ALL DETECTABLE WARNING AREAS SHALL START 6 INCHES
FROM THE FLOW LINE OF THE CURB, AND BE 24 INCHES
IN DEPTH, AND COVER THE COMPLETE WIDTH OF THE RAMP
AREA ONLY.

STATE OF MAINE
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VIEWS AND DETAILS OF THE
DETECTABLE WARNING

CURB RAMP

DETAILS

SHEET NUMBER

1